

Model

| | | | | |
|-------------|-------------------|------------------|-------------|-----------------|
| Designation | KLF5.6CNDS | 220-240V/50Hz 1~ | Sales code: | 106h2603 |
|-------------|-------------------|------------------|-------------|-----------------|

Compressor design

| | | | |
|----------------------------|---|-----------------------|--------------------------------|
| Oil type | Polyolester | Refrigerant(s) | R290 |
| Oil viscosity | 9,7cST | Displacement | 5,6cm ³ / 0,34cu.in |
| Oil quantity | 170cm ³ / 5,7fl.oz | Compressors on pallet | 100 |
| Refr. charge - tech. limit | 200g / 7,1oz | | |
| Free gas volume comp. | 1605cm ³ / 54,3fl.oz | | |
| Weight | 9,4kg / 20,7lbs | | |
| Motor protection | external | | |
| Winding resistance main | 10,7Ω (at 25°C) | | |
| Winding resistance aux | 17Ω (at 25°C) | | |
| Max. winding temp. | 125°C / 257°F | | |
| Max. discharge temp. | 130°C / 266°F | | |
| Additional note | Very good robustness against liquid intake. Ice-cube maker optimization - indirect suction intake. | | |



General - Configurations with KLF5.6CNDS

| | Conf. 1 |
|------------------------|----------------|
| Motorconfiguration | CSIR |
| Power supply (nominal) | 220-240V/50Hz |
| Number of phases | 1 |
| Voltage range | 198-254V |
| Approvals | VDE, CCC |
| Starting torque | HST |
| Note | - / - |

Applications with KLF5.6CNDS

| | Conf. 1 |
|-------------------------|----------------|
| Refrigerant | R290 |
| Application | LBP+MBP |
| System cooling | fan 3m/s |
| Hot gas defrost | OK |
| Long interval pull down | OK |

Electrical data - Configurations with KLF5.6CNDS

| | Conf. 1 |
|------------------------------|----------------|
| Starting device type | relay |
| Run capacitor | -/- |
| Start capacitor | 80μF |
| LRA (locked rotor amps / 4s) | 10,7A |
| RLA (rated load amps / 1s) | 1,7A |
| Cut in current | 10,7A |

Model

Designation

KLF5.6CNDS

220-240V/50Hz 1~

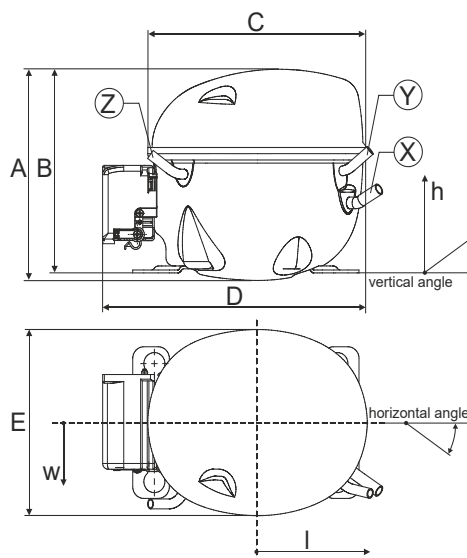
Sales code:

106h2603

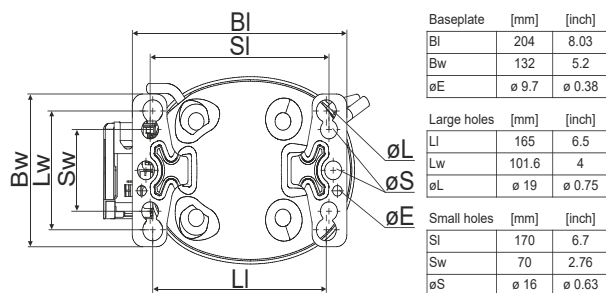
Compressor dimensions

| Housing | A Height | 182mm / 7,17in |
|---------|-------------------|----------------|
| | B Height | 175mm / 6,89in |
| | C Length shell | 198mm / 7,8in |
| | D Length w. cover | 238mm / 9,37in |
| | E Width | 160mm / 6,3in |

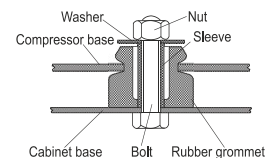
| Connectors | | Suction | Discharge | Process |
|-----------------------|------|--------------|--------------|--------------|
| | | X | Y | Z |
| Diameter | [mm] | øi 8,11-8,29 | øi 6,11-6,29 | øi 6,11-6,29 |
| (i:inside, o:outside) | [in] | øi 0,32-0,33 | øi 0,24-0,25 | øi 0,24-0,25 |
| Material | | copper | copper | copper |
| Horizontal angle | ±2° | 35° | 13° | 0° |
| Vertical angle | ±2° | 30° | 40° | 145° |
| Position l/h/w | [mm] | 120/72/57 | 112/106/81 | -97/94/72 |
| | [in] | 4,7/2,8/2,2 | 4,4/4,2/3,2 | -3,8/3,7/2,8 |
| Straight tube l. | [mm] | 14 | 14 | 14 |
| | [in] | 0,5 | 0,5 | 0,5 |



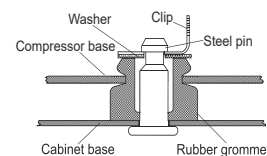
Compressor fixation



Bolt joint



Snap-on



Mounting accessories

| Mounting accessories | one comp. | multi pack |
|----------------------------|-----------|------------|
| Bolt joint M6 ø16mm | 118-1917 | 118-1918 |
| Bolt joint ø1/4" ø16mm | 118-1946 | |
| Bolt joint ø1/4" ø19mm | 118-1949 | |
| Snap-on ø7,3 ø16mm | 118-1947 | 118-1919 |

Application notes

Provision for PE Grounding is located at the PE Stamp on the compressor

Model

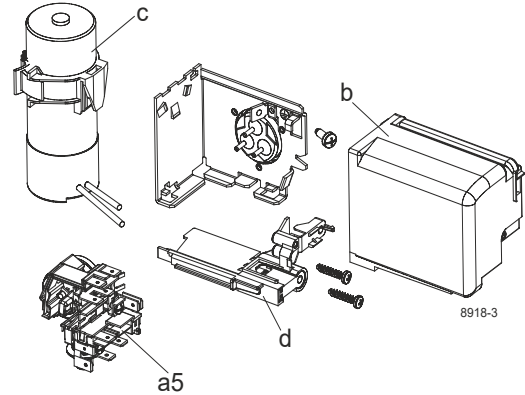
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Configuration

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| Power supply (nominal) | 220-240V/50Hz 1~ |
| Refrigerant | R290 |
| Application | LBP+MBP |
| Voltage range | 198-254V |
| Starting torque | HST |
| Approvals | VDE |
| | CCC |

Electrical accessories / wiring diagram

CSIR

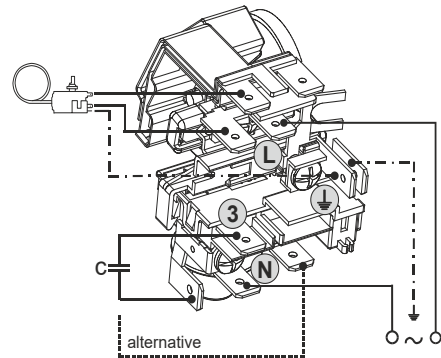


Ambient/ machine room temperatures minimum /maximum

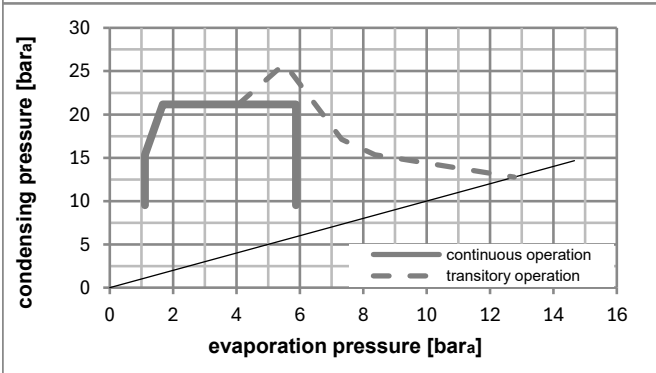
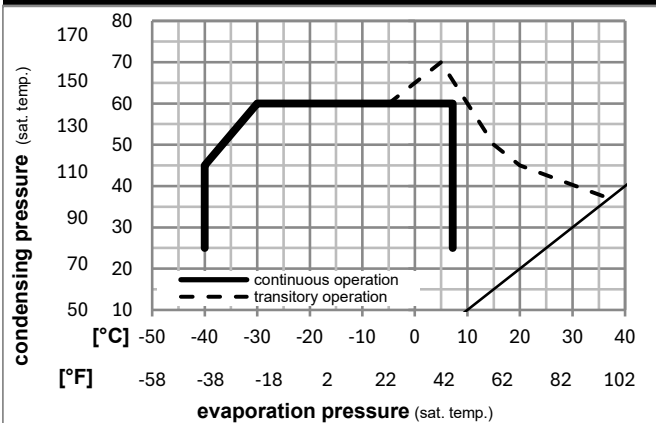
Ambient temperature range: 10 - 43°C / 50 - 110°F

Machine room temperature range: 10 - 48°C / 50 - 119°F

Compressor cooling: fan 3m/s



Operation pressure range



Components

| | | |
|------|------------------------------------|----------|
| a5 | current relay (T0089/L6-S2) | 117U7070 |
| c | start capacitor (80µF, 6.3mm) | 117U5001 |
| b, d | cover + clamp + screws(5VA) in bag | 103N1060 |

Alternative components

| | | |
|------|------------------------------------|----------|
| b, d | cover + clamp + screws(5VA-compl.) | 103N0600 |
|------|------------------------------------|----------|

Model

Designation **KLF5.6CNDS** **220-240V/50Hz** Conf. 1 Sales code: **106h2603**

Optimization + standard conditions

R290, 220V/50Hz, CSIR, fan 3m/s, VDE, CCC

| | Evaporating pressure (saturation temperature) | | | | Cooling capacity | | | COP | EER | P1 | Power consumption | | ASHRAE LBP | |
|------|---|-----|-----|------|------------------|---------|----------|------|------|------|-------------------|------|------------|-------------|
| | pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | | | | I | m | | |
| [°C] | -23 | 54 | 32 | 32 | 264,1 | 902 | 227,3 | 1,51 | 5,14 | 1,30 | 175,3 | 1,21 | 2,67 | |
| [°F] | -10 | 130 | 90 | 90 | | | | | | | | | | |
| [°C] | -25 | 55 | 32 | 55 | 196,6 | 671 | 169,2 | 1,16 | 3,97 | 1,00 | 169,2 | 1,19 | 2,45 | cecomaf LBP |
| [°F] | -13 | 131 | 90 | 131 | | | | | | | | | | |
| [°C] | -35 | 40 | 20 | 40 | 143,9 | 491 | 123,8 | 1,18 | 4,02 | 1,01 | 122,2 | 1,06 | 1,64 | EN12900 LBP |
| [°F] | -31 | 104 | 68 | 104 | | | | | | | | | | |
| [°C] | -7 | 54 | 35 | 46 | 477,4 | 1631 | 410,9 | 2,02 | 6,90 | 1,74 | 236,4 | 1,42 | 5,45 | ASHRAE MBP |
| [°F] | 20 | 130 | 95 | 115 | | | | | | | | | | |
| [°C] | -10 | 55 | 32 | 55 | 378,5 | 1293 | 325,7 | 1,67 | 5,72 | 1,44 | 226,0 | 1,38 | 4,79 | cecomaf MBP |
| [°F] | 14 | 131 | 90 | 131 | | | | | | | | | | |
| [°C] | -10 | 45 | 20 | 45 | 419,9 | 1434 | 361,3 | 2,04 | 6,96 | 1,75 | 205,9 | 1,31 | 5,16 | EN12900 MBP |
| [°F] | 14 | 113 | 68 | 113 | | | | | | | | | | |

Performance tables

R290, 220V/50Hz, CSIR, fan 3m/s, VDE, CCC

| | pe | | Cooling capacity | | | COP | EER | | P1 | I | m |
|------------------|------|------|------------------|---------|----------|------|----------|-----------|-------|------|------|
| | [°C] | [°F] | [W] | [Btu/h] | [kcal/h] | | [Btu/Wh] | [kcal/Wh] | | | |
| [°C / °F] | -40 | -40 | 108,7 | 371 | 93,5 | 0,95 | 3,23 | 0,81 | 114,9 | 1,05 | 1,22 |
| cond. pressure | -35 | -31 | 143,2 | 489 | 123,2 | 1,11 | 3,78 | 0,95 | 129,3 | 1,08 | 1,60 |
| pc= 45/113 | -25 | -13 | 232,6 | 794 | 200,2 | 1,45 | 4,95 | 1,25 | 160,5 | 1,16 | 2,62 |
| return gas temp. | -15 | 5 | 357,8 | 1222 | 308,0 | 1,87 | 6,38 | 1,61 | 191,6 | 1,26 | 4,07 |
| RGT= 32/90 | -5 | 23 | 529,1 | 1807 | 455,4 | 2,42 | 8,26 | 2,08 | 218,8 | 1,35 | 6,09 |
| liquid temp | 0 | 32 | 635,2 | 2169 | 546,7 | 2,77 | 9,44 | 2,38 | 229,7 | 1,39 | 7,37 |
| Tliq= 45/113 | 7,2 | 45 | 815,3 | 2784 | 701,7 | 3,38 | 11,55 | 2,91 | 241,1 | 1,43 | 9,58 |
| [°C / °F] | -40 | -40 | 73,4 | 251 | 63,2 | 0,64 | 2,18 | 0,55 | 115,0 | 1,05 | 0,90 |
| cond. pressure | -35 | -31 | 110,0 | 376 | 94,7 | 0,83 | 2,85 | 0,72 | 132,0 | 1,08 | 1,36 |
| pc= 55/131 | -25 | -13 | 196,6 | 671 | 169,2 | 1,16 | 3,97 | 1,00 | 169,2 | 1,19 | 2,45 |
| return gas temp | -15 | 5 | 309,2 | 1056 | 266,1 | 1,49 | 5,09 | 1,28 | 207,6 | 1,31 | 3,89 |
| RGT= 32/90 | -5 | 23 | 458,2 | 1565 | 394,3 | 1,88 | 6,43 | 1,62 | 243,3 | 1,44 | 5,84 |
| liquid temp | 0 | 32 | 549,5 | 1877 | 472,9 | 2,12 | 7,25 | 1,83 | 259,0 | 1,50 | 7,06 |
| Tliq= 55/131 | 7,2 | 45 | 704,0 | 2404 | 605,9 | 2,53 | 8,66 | 2,18 | 277,7 | 1,57 | 9,17 |